

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ashley J. Birkett) PATENT
Serial No.: 09/930,915)
Filed: August 15, 2001) Attorney Docket
For: Immunogenic HBc Chimer) ICC-102.2
Particles Having Enhanced) 4564-81175
Stability)
Examiner:)

INFORMATION DISCLOSURE STATEMENT

BOX IDS
Commissioner For Patents
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §1.97, Documents A1-A71 are listed on the attached Form PTO-1449.. Documents A1-A5 and A15-A31 were disclosed and discussed in the text of the subject patent application. Document A13 is the published PCT application corresponding to the present application.

Document A14 is the published PCT application of a related invention by the present inventor, Application Serial No. 09/931,325 filed August 15,2001, and Documents A6-A8 and A32-65 were disclosed and discussed in that related pending application by the inventor. Document A6, an issued U.S. patent, and Document A11, its published PCT counterpart,

describe an invention of the present inventor that relates to a hepatitis B core-based vaccine. Documents A9, A12, A66-67 and A71 were located subsequent to the filing of this application, and thought to possibly be material because of their subject matter, and are therefore provided herewith. Document A68 is a poster presented by the inventor and co-workers in October of 1999 of results using vaccine candidates.

None of these cited documents disclose, enable or teach claimed subject matter of the present invention.

No inferences should be drawn that the attached list represents a comprehensive investigation, or that any material disclosed is equivalent to the subject invention.

The cited documents disclose numerous specific features. There has been no attempt to list each and every feature disclosed by each document. The Examiner is requested to review the documents and determine the extent of the materiality of the document disclosures with respect to the present invention.

The discussion of any art and the citation of any document herein is not to be construed as an admission that the art or document disclosure is necessarily within the invention

field of endeavor, that the art or document disclosure is necessarily prior in time to a particular date which may be relevant to the instant patent application, and/or that the art or document disclosure is otherwise necessarily prior art as defined by the patent law with respect to the instant invention and application.

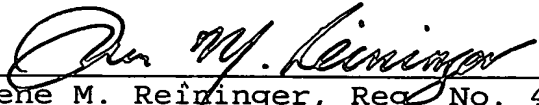
Also, there is reserved the right to later set forth how the instant invention is distinguished over the disclosure of any document or other art, including the disclosures of the art and documents recited herein, that may be cited by the Examiner in rejecting a claim in the instant patent application.

The recitation herein of the art and documents is not to be construed as an assertion that more pertinent art could not possibly be in existence.

If any fees or petition are believed to be necessary, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

Respectfully submitted,

By


Irene M. Reifinger, Reg No. 48,439

December 10, 2002

(Rev. 5/92) Comparable to Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. ICC-102.1 (4564-81175)		Serial No. 09/931,315	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicants Ashley J. Birkett			
				Filing Date August 15, 2001		Group	

U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	A1	4,818,527	04/1989	Thornton, et al.	424	88	
	A2	4,882,145	11/1989	Thornton, et al.	424	88	
	A3	5,143,726	09/1992	Thornton, et al.	424	88	
	A4	5,928,902	07/1999	DeWilde, et al.	435	69.3	
	A5	5,990,085	11/1999	Ireland, et al.			
	A6	6,231,864	5/2001	Birkett	424	189.1	
	A7	5,614,194	3/1997	Colman, et al.	424	191.1	
	A8	4,886,782	12/1989	Good, et al.	514	12	

FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	A9	WO 01/98333	12/27/01	PCT				
	A10	WO 99/40934	8/19/99	PCT				
	A11	WO 00/32625	6/8/2000	PCT				
	A12	WO 01/27281	4/19/2001	PCT				
	A13	WO 02/14478	2/21/2002	PCT				
	A14	WO 02/13765	2/21/2002	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
	A15	Schodel et al., <i>J. Exp. Med.</i> (1994) 180(3): p. 1037-46
	A16	Pumpens et al., <i>Intervirology</i> (1995) 38:63-74
	A17	Metzger et al., <i>J. Gen. Virol.</i> (1998) 79:587-590
	A18	Hoffman et al., <i>Nat. Med.</i> (1997) 3(1):80-83
	A19	Conway et al., <i>Nature</i> , (1997) 386:91-94
	A20	Bottcher et al., <i>Nature</i> , (1997) 386:88-91
	A21	Zheng et al., <i>J. Biol. Chem.</i> , (1992) 267(13):9422-9429
	A22	Birnbaum et al., <i>J. Virol.</i> (1990) 64, 3319-3330
	A23	Clarke et al., <i>Vaccines</i> (1991) 91, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, pp.313-318

Examiner	Date Considered
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

(Rev. 5/92) Comparable to Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. ICC-102.1 (4564-81175)		Serial No. 09/931,315	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicants Ashley J. Birkett			
				Filing Date August 25, 2001		Group	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	A24	Gallina et al. <i>J. Virol.</i> (1989) 63:4645-4652					
	A25	Inada et al. <i>Virus Res.</i> , (1989) 14:27-48					
	A26	Maassen et al. <i>Arch. Virol.</i> (1994) 135:131-142					
	A27	Schodel et al. <i>Infect. Immunol.</i> (1994) 62:1669-1676					
	A28	Ulrich et al. <i>Adv. Virus Res.</i> Vol. 50 (1998) Academic Press pages 141-182					
	A29	Zlotnick et al. (1997) <i>Proc. Nat'l. Acad. Sci., USA</i> , 94:9556-9661					
	A30	Nieryneck et al. (Oct. 1999) <i>Nature Med.</i> , 5(10):1157-1163					
	A31	Kratz et al. (1999) <i>Proc. Natl. Acad. Sci., USA</i> , 96:1915-1920					
	A32	Marlar, T., et al., <i>Trans. R. Soc. Trop. Med. Hyg.</i> , (1995) 89(3): p. 307-308					
	A33	Garg et al., <i>Trans. R. Soc. Trop. Med. Hyg.</i> , (1995) 89(6): p. 656-657					
	A34	Baird et al., <i>Am. J. Trop. Med. Hyg.</i> , (1991) 44(5): p. 547-552					
	A35	Baird et al., <i>Trans R Soc Trop Med Hyg</i> , (1996) 90(4): p. 409-411					
	A36	Baird et al., <i>J. Infect. Dis.</i> , (1995) 171(6): p. 1678-1682					
	A37	Murphy et al., <i>Lancet</i> , (1993) 341(8837): p. 96-100					
	A38	Schwartz et al., [letter]. <i>N. Engl. J. Med.</i> , (1991) 324(13): p. 927					
	A39	Rieckmann et al., <i>Lancet</i> , (1989) 2(8673): p. 1183-1184					
	A40	Charoenlarp et al., <i>Southeast Asian J. Trop. Med. Public Health</i> , (1973) 4(1): p. 135-137					
	A41	Krotoski, [letter]. <i>N. Engl. J. Med.</i> , (1980) 303(10): p. 587					
	A42	Schuurkamp et al., <i>Trans. R. Soc. Trop. Med. Hyg.</i> , (1992) 86(2): p. 121-122					
	A43	Good, et al., <i>Annu. Rev. Immunol.</i> , (1998) 16: p. 57-87					
	A44	Clyde et al., <i>Am. J. Med. Sci.</i> , (1973) 266(6): p. 398-403					
	A45	Rieckmann et al., <i>Trans. R. Soc. Trop. Med. Hyg.</i> , (1974) 68(3): p. 258-259					
	A46	Zavala et al., <i>Science</i> , (1985) 228(4706): p. 1436-40					
	A47	Nussenzweig et al., <i>Ciba Found. Symp.</i> , (1986) 119: p. 150-163					
	A48	Etlinger et al., <i>Immunology</i> , (1988) 64(3): p. 551-558					
	A49	Etlinger et al., <i>J. Immunol.</i> , (1988) 140(2): p. 626-633					
	A50	Herrington et al., <i>Nature</i> , (1987) 328(6127): p. 257-259					
Examiner				Date Considered			
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

(Rev. 5/92) Comparable to Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. ICC-102.1 (4564-81175)		Serial No. 09/931,3155	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicants Ashley J. Birkett			
				Filing Date August 25, 2001		Group	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	A51	Ballou et al., <i>Lancet</i> , (1987) 1(8545): p. 1277-1281					
	A52	Good et al., <i>Science</i> , (1987) 235(4792): p. 1059-62					
	A53	Calvo-Calle et al., <i>J. Immunol.</i> , (1993) 150(4): p. 1403-1412					
	A54	Moreno et al., <i>Int. Immunol.</i> , (1991) 3(10): p. 997-1003					
	A55	Stoute et al., <i>N. Engl. J. Med.</i> , (1997) 336(2): p. 86-91					
	A56	Stoute et al. <i>J. Infect Dis.</i> (1998 Oct) 178(4):1139-44					
	A57	Milich et al., <i>Science</i> , (1986) 234(4782): p. 1398-1401					
	A58	Herrington et al., <i>Am J Trop Med Hyg.</i> (1991) 45(6): p. 695-701					
	A59	Schodel et al., <i>Behring Inst. Mitt.</i> (1997) (98): p. 114-119					
	A60	Seifer et al., <i>Intervirology</i> (1995) 38:47-62					
	A61	Qari et al. <i>Lancet</i> (1993) 341:780-783					
	A62	Moreno et al. <i>J. Immunol.</i> (1993) 151(1): 489-499					
	A63	Hoffman et al. <i>Malaria Vaccine Development</i> , Chapter 3: Attacking the Infected Hepatocyte, 1996 American Society for Microbiology, Washington, D.C., pp. 35-75					
	A64	Calvo-Calle et al. <i>J. Immunol.</i> (1997) 159(3): p. 1362-1373					
	A65	Coatney et al. (1962) 9:290-293					
	A66	Krüger et al. <i>Biol. Chem.</i> (1999) 380:275-276					
	A67	Nardin et al. <i>J. Exp. Med.</i> (1982) 156:20-30					
	A68	Poster presented by J. Haron at the Center for Advanced Technology and Medicine (CABM) Symposium, Rutgers University Medical Center on October 13-14, 1999					
	A69	Isaguliants et al. <i>Immunol. Ltr.</i> (1994) 42:173-178					
	A70	Schodel et al. <i>J. Biotechnol.</i> (1996) 44:91-96					
	A71	Wynne et al., <i>Mol. Cell</i> (June 1999) 3:771-780					
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